

ABSTRACT

The invention provides, in a general sense, a new labeling strategy employing compounds that are are N_2S_2 chelates conjugated to a targeting ligand, wherein the targeting ligand is a disease cell cycle targeting compound, a tumor angiogenesis targeting ligand, a tumor apoptosis targeting ligand, a disease receptor targeting ligand, 5 amifostine, angiostatin, monoclonal antibody C225, monoclonal antibody CD31, monoclonal antibody CD40, capecitabine, a COX-2 inhibitor, deoxycytidine, fullerene, herceptin, human serum albumin, lactose, leuteinizing hormone, pyridoxal, quinazoline, thalidomide, transferrin, or trimethyl lysine. The present invention also pertains to kits 10 employing the compounds of interest, and methods of assessing the pharmacology of an agent of interest using the present compounds.